

In the Claims

Please amend the claims as follows:

1-52. (Canceled)

53. (Currently Amended) An isolated antisense oligonucleotide nucleic acid that is complementary contains a nucleotide sequence that is the complement SEQ ID NO:1 or SEQ ID NO:2, and hybridizes to at least a portion of a gene encoding for a peripheral-type benzodiazepine receptor (PBR) that encodes SEQ ID NO:3 ~~comprises the nucleic acid sequence contained in SEQ ID NO:1 or SEQ ID NO:2;~~

wherein said nucleic acid oligonucleotide, when introduced into a cell line that expresses said PBR gene inhibits the expression of the gene thereof, and thereby inhibits proliferation of said cell line relative to an otherwise identical cell line which does not comprise said nucleic acid antisense oligonucleotide.

54. (Currently Amended) The nucleic acid antisense oligonucleotide of claim 53, which possesses a complementary structure to ~~at least a portion of the nucleic acid sequence contained in~~ SEQ ID NO:1.

55. (Currently Amended) The nucleic acid antisense oligonucleotide of claim 53, which possesses a complementary structure to ~~at least a portion of the nucleic acid sequence contained in~~ SEQ ID NO:2.

56. (Canceled)

57. (Currently Amended) The nucleic acid antisense oligonucleotide of claim 53, which inhibits the proliferation of a human breast cancer cell line.

58. (Withdrawn) A method for inhibiting the proliferation of a malignant cell line that expresses the PBR gene, comprising introducing into said cell line an antisense oligonucleotide according to claim 53 in an amount effective to inhibit cell proliferation.

59. (Withdrawn) A method for inhibiting the proliferation of a malignant cell line that expresses the PBR gene, comprising introducing into said cell line an antisense oligonucleotide according to claim 54 in an amount effective to inhibit cell proliferation.

60. (Withdrawn) A method for inhibiting the proliferation of a malignant cell line that expresses the PBR gene, comprising introducing into said cell line an antisense oligonucleotide according to claim 55 in an amount effective to inhibit cell proliferation.

61. (Withdrawn) A method for inhibiting the proliferation of a malignant cell line that expresses the PBR gene, comprising introducing into said cell line an antisense oligonucleotide according to claim 56 in an amount effective to inhibit cell proliferation.

62. (Withdrawn) A method for inhibiting the proliferation of a malignant cell line that expresses the PBR gene, comprising introducing into said cell line an antisense oligonucleotide according to claim 57 in an amount effective to inhibit cell proliferation.

63. (Withdrawn) The antisense oligonucleotide of claim 53, which is comprised in a proteoliposome containing viral envelope receptor proteins.

64. (Currently Amended) The nucleic acid ~~antisense oligonucleotide~~ of claim 53, which is present in ~~comprises part of~~ a vector.

65. (Canceled)

66. (Withdrawn) The antisense oligonucleotide of claim 53, which is contained in a carrier.

67. (Withdrawn) The antisense oligonucleotide of claim 66 wherein said carrier is a protein selected from the group consisting of a cytokine or polylysine-glycoprotein carrier.

68. (Withdrawn) The antisense oligonucleotide of claim 53, which is comprised in a microbead.

69. (Canceled)

70. (Currently Amended) The nucleic acid ~~antisense oligonucleotide~~ of claim 53, which ~~consists~~ comprises a nucleotide sequence selected from the group consisting of the complement of SEQ ID NO:1 or and SEQ ID NO:2.

71. (Canceled)

72. (Currently Amended) The nucleic acid ~~antisense oligonucleotide~~ of claim ~~64~~ 70, which ~~is encoded by a vector and~~ is synthesized in a mammalian cell following introduction of said vector into said cell.

73. (Currently Amended) The nucleic acid ~~antisense oligonucleotide~~ of claim 72, which is synthesized in and inhibits the proliferation of a human breast cancer cell containing a PBR protein that comprises the amino acid sequence shown in SEQ ID NO:3 when the vector is introduced into said cell.

74. (Currently Amended) A pharmaceutical composition comprising an ~~An~~ isolated nucleic acid ~~antisense oligonucleotide~~ that is complementary to SEQ ID NO:1 or SEQ ID NO:2, or is a fragment of 7 to 40 nucleotides thereof, wherein the isolated nucleic acid hybridizes to nucleic acid encoding SEQ ID NO:3 at least a portion of a gene encoding a peripheral-type benzodiazepine receptor (PBR) that comprises the PBR amino acid sequence shown in SEQ ID NO:3 and a pharmaceutically acceptable vehicle;

~~which antisense oligonucleotide~~ wherein the isolated nucleic acid is present in an amount which inhibits the expression of a said PBR gene when it is introduced into a mammalian cell that expresses said PBR gene, and thereby inhibits proliferation of said cell relative to an otherwise identical cell which does not contain said antisense oligonucleotide.

75. (Currently Amended) The composition ~~antisense oligonucleotide~~ of claim 74, wherein ~~the which is complementary to a portion of a PBR gene that encodes a fragment of a PBR protein shown in SEQ ID NO:3 that comprises the mutant residues threonine 147 or and arginine 162.~~

76. (Canceled)

77. (Currently Amended) The composition ~~antisense oligonucleotide~~ of claim 74, which inhibits the proliferation of a human breast cancer cell containing a PBR protein that comprises the amino acid sequence shown in SEQ ID NO:3 when ~~the oligonucleotide~~ is introduced into said cell.

78. (Currently Amended) The composition ~~antisense oligonucleotide~~ of claim 74, wherein the nucleic acid ~~which is encoded by~~ present in a vector and is synthesized in a mammalian cell following introduction of said vector into said cell.

79. (Currently Amended) The composition ~~antisense oligonucleotide~~ of claim 78, wherein the nucleic acid ~~which~~ is synthesized in a mammary gland cell following introduction of said vector into said mammary gland cell.

80. (Currently Amended) The composition ~~antisense oligonucleotide~~ of claim 78, wherein the nucleic acid ~~which~~ is synthesized in and inhibits the proliferation of a human breast cancer cell containing a PBR protein that comprises the amino acid sequence shown in SEQ ID NO:3 when the vector is introduced into said cell.

81. (New) An isolated nucleic acid consisting of SEQ ID NO:1, SEQ ID NO:2, or the complement thereof.

82. (New) An isolated nucleic acid encoding a PBR comprising SEQ ID NO:3.